

REMARKS/ARGUMENTS

Claims 13, 15-23, 59-61, 63-65 and 67 were examined. Claims 15, 59, and 61 have been newly amended. Claims 1-12, 14, 24-58, 62, 66, and 68-72 were previously canceled. No claims are newly canceled. No new matter has been added by these amendments. Examination and reconsideration of all pending claims are respectfully requested.

Claim Objections

Claim 15 was objected to because of informalities. To correct the informalities, Applicant has amended claim 15 to depend from claim 13. Such an amendment does not narrow the scope of the claim.

Claim Rejections under 35 U.S.C. §102

Claims 59, 61, 63-65 are rejected under 35 U.S.C. §102(b) as being anticipated by McCoy (U.S. Patent No. 5,014,160). Such rejections are traversed in part and overcome in part as follows.

Applicants have amended claim 59 to more clearly define the novel aspects of the present invention. Amended claim 59 recites a method of shielding an electronic component on a printed circuit board. The method comprises attaching a base portion of a metallized dielectric substrate shield body onto a top surface of a ground trace that is disposed on the printed circuit board, the ground trace surrounding the electronic component. The base portion comprises a flange that contacts the top surface of the ground trace and extends substantially parallel to the surface of the printed circuit board and a plurality of walls that extend substantially orthogonal to a surface of the printed circuit board. A top portion of a metallized dielectric substrate shield body is removably coupled to the plurality of walls of the base portion of the metallized dielectric substrate shield body to enclose the electronic component. The cited reference does not describe or suggest such a method.

In contrast, McCoy provides a first shield member 20 and a second shield member 30 that are comprised of "a suitable electrically conductive material, such as beryllium copper"

(col. 4, lines 10-12). Moreover, second shield member 30 comprises tabs that are configured to extend through elongate slots 18 in the printed circuit board so as to allow the first and second shield members 20, 30 to contact each other. (See Figs. 2 and 3).

Thus, McCoy fails to teach or suggest (1) attaching a metallized dielectric substrate shield body to a ground trace, or (2) that the base portion comprises a flange that contacts the top surface of the ground trace and extends substantially parallel to the surface of the printed circuit board. Since McCoy fails to describe such a method, independent claim 59 is allowable over McCoy. For at least the same reasons, dependent claims 60-61, 63-65, and 67 are also allowable.

Claim Rejections under 35 U.S.C. §103

Claims 13, 15 - 17, & 21 - 23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Higgins III (U.S. Patent No. 5,639,989) in view of DiLeo (U.S. Patent No. 5,968,600). Claims 18 - 19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Higgins in view of DiLeo as applied to claims 13, 15 - 17, & 21 above, and further in view of Askew (U.S. Patent No. 6,350,951). Claim 20 is rejected under 35 U.S.C. §103(a) as being unpatentable over Higgins in view of DiLeo and further in view of Gabower (*Thermoformed Vacuum Metallized Inserts For EMI Shielding of Electronic Devices*, Consumer Electronics Show, Flamingo Hilton and Tower, Las Vegas, Nevada, pp. 151 - 158). Such rejections are traversed in part and overcome in part as follows.

Applicants note that the Examiner did not respond to the Applicants arguments filed in the response filed on November 4, 2004 to the Office Action dated May 5, 2004. Applicants respectfully request that, per MPEP §707.07(f), the Examiner consider and kindly respond to Applicants' arguments. For ease of reference, Applicants are repeating the remarks previously filed, below.

First, there must be some suggestion of a desirability of the combination. See MPEP § 2143.01. The mere mentioning of vacuum metallizing a metal layer over plastics in DiLeo is insufficient to establish the motivation to modify Higgins III. The fact that Higgins III and DiLeo can be combined is not sufficient to establish *prima facie* obviousness. In

determining whether there is a motivation to combine references, the Examiner must consider the references in their entirety. See MPEP §2141.02.

However, in rejecting the claims, the Examiner focused on one sentence in the background (col. 1, lines 27-29) and disregarded the remainder of the DiLeo disclosure. The entire DiLeo description, except for the single referenced sentence in the background section, is directed toward polymer based aqueous coating composition for molded plastics. A person reading the DiLeo reference as a whole would not be motivated to combine the vacuum metallization method described in the single sentence in the background with Higgins III to come to the Applicants claimed invention.

Applicants disagree with the Examiner's statement that "DiLeo reference cites several advantages (i.e., cost effective, environmentally desirable, and consistent as stated in column 1, lines 27)..." In fact, a closer reading of DiLeo reveals that DiLeo actually states that "plastic plating is expensive, environmentally undesirable, and inconsistent." While the next sentence discusses vacuum metallization, there is nothing in DiLeo which states that vacuum metallizing actually solves the deficiencies of plastic plating. There is nothing in DiLeo which provides a suggestion of using vacuum metallization with Higgins III.

Second, the references would appear to teach against modifying the polymer based conductive layer of Higgins III with a vacuum metallized layer. In particular, a person of ordinary skill in the art reading both Higgins III and DiLeo would see that both Higgins III and DiLeo teach polymer based conductive layers. DiLeo describes their polymer based, aqueous coating composition at col. 2, lines 1-21. Higgins III describes a compounded, polymer based, general purpose structure at col. 4, lines 31-55. Higgins III structure has one or more electrically conductive layers that include particulate-filled polymers.

Importantly, Higgins III recites that the electrically conductive layer "should also contain dielectric materials which are highly lossy at E-field frequencies present in the EMI field." (col. 4, lines 41+) If the polymer/dielectric based EMI layer of Higgins III is replaced with the vacuum metallized layer, as suggested by the Examiner, the resultant shield would no longer have the dielectric material, as desired by Higgins III. Consequently, the modification

proposed by the Examiner would appear to change the principle of operation of Higgins III (e.g., no dielectric layer), which is evidence against *prima facie* obviousness. See MPEP §2143.01.

Finally, because both Higgins III and DiLeo both describe polymer based EMI shield layers, even if *arguendo* a person of ordinary skill in the art were to combine the references, at best the resultant combination would include the insulating conformal layer of Higgins III with the conductive, polymer based aqueous coating composition of DiLeo.

For the above reasons, independent claim 13 is allowable over the cited references. Dependent claims 15 - 17, & 21 - 23 should be allowable at least for depending from allowable independent claim 13. Additionally, the dependent claims further provide novel aspects that are not described or suggested by the cited references.

Claims 18 - 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Higgins in view of DiLeo as applied to claims 13, 15 - 17, & 21 above, and further in view of Askew. Since dependent claims 18 - 19 depend from independent allowable claim 13 (as noted above) then claims 18-19 should be allowable. Additionally, dependent claims 18-19 further provide novel aspects that are not described or suggested by the cited references. For example, dependent claim 18 recites applying an insulating conformal coating over the first conductive layer. Claim 19 recites that the insulating conformal coating is waterproof.

Claims 60 and 67 are rejected under 35 U.S.C. §103(a) as being unpatentable over McCoy in view of Mok et al. (U.S. Patent No. 5,704,117). Since dependent claims 60 and 67 depend from allowable independent claim 59 (as noted above), dependent claims 60 and 67 are allowable.

CONCLUSION

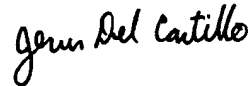
In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

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Amdt. dated July 26, 2005
Reply to Office Action of February 2, 2005

PATENT

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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